NO. 3084

A gasoline pump, which is a mechanism or machine adapted to measure and deliver liquid by volume, graduated in unites of measure other than the standard units of liquid measure provided for in Article 5732, Revised Civil Statutes, 1925, i.e., the standard gallon and its parts derived by continual division by the number two, is in violation of the civil and criminal weights and measures laws of Texas and may not be legally used in commercial transactions in this State.

OFFICE OF ATTORNEY GENERAL

September 26, 1939

Honorable W. S. Bussey
Chief of Weights & Measures Division
Department of Agriculture
Austin, Texas

Dear Sir:

Opinion No. O-1025
Re: Can a gasoline pump which is a mechanism or machine adapted to measure and deliver liquid by volume, and which is graduated in units of measure other than those specified in Article 5732, Revised Civil Statutes, 1925, be legally used in commercial transactions in this State?

We are in receipt of your request for an opinion of this department on the following question:

"We understand from Article 5732 that liquid capacity measures used in this State must be of one of the capacities specified therein and we respectfully request your opinion as to whether or not a gasoline pump which is a mechanism or machine adapted to measure and deliver liquid by volume and which is graduated in units of measure other than those specified in Article 5732, namely; 1/10th gallon, can be legally used in commercial transactions in this State."

A comprehensive appraisal of the statutory law of Texas on weights and measures is necessary in order to answer your inquiry.

Article 5705 through Article 5736, with amendments, Vernon's Annotated Civil Statutes, and Article 1035 to Article 1046, of the Revised Criminal Statutes of 1925, comprise the bulk of the law of this State in respect to this subject.

Article 5712 of the Revised Civil Statutes of 1925 provides:

> "The standard weights and measures received from the United States under a resolution of Congress, approved June 14, 1936, and such new weights and measures as shall be received from the United States as standard weights and measures in addition thereto, or in renewal thereof, and such as shall be procured by the State in conformity therewith and certified by the Bureau of Standards, shall be the State's standards by which all state and municipal standards of weights and measures shall be tried, authenticated, proved and sealed."

The first sentence of Article 5730, Revised Civil Statutes of 1925, reads as follows:

> "The standard of weights and measures adopted and used by the Government of the United States is hereby declared the legal standard of weights and measures of this State; . . . "

The above Articles clearly indicate that the standard weights and measures of the United States are adopted by the State of Texas.

It is so well recognized as not to require proof that the wine gallon of 231 cubic inches is the standard of liquid measurement adopted by the Federal Government. The standards of the customary weights and measures furnished to the States under authority of the joint resolution of Congress of June 14, 1836, comprised:

> 33 avoirdupois weights, from 50 pounds to 0.0001 ounce
> 27 troy weights, from 1 pound to 0.0001 ounce
> A yard measure with matrix
> 5 liquid capacity measures, from 1 gallon to 1/2 pint (Underscoring ours.)
> A half-bushel dry capacity measure

At this time Texas was not a state, and did not receive gratis a set of the above standards of the customary weights and measures from the Federal Government. However, the first Legislature of the State of Texas enacted in 1846 a law authorizing the Governor to procure and have copied for the benefit of the several counties of Texas a full set of weights and measures in conformity to the standards now used and adopted by the Government of the United

States, and this Act provided for the distribution of copies of said set of standards.

Section 1 of the Act of 1846 reads as follows:

> "BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS, that the Governor be, and he is hereby authorized to procure, at the expense of the State, a set of weights and measures, in conformity with the standard adopted and now used by the Government of the United States, and to place the same under such care and at such suitable and convenient place as will, in his opinion, most effectually accomplish the object hereinafter expressed."

Section 4 of the same Act provides:

> "BE IT FURTHER ENACTED, that the standard of weights and measures adopted and now used by the Government of the United States be and the same is hereby declared the only legal standard of weights and measures for this State."

From the beginning of the history of this State, the only legal standards of weights and measures have been the standards of weights and measures of the United States Government. In respect to measures of liquid capacity, the law has provided that liquid measures shall be in terms of the United States gallon, 231 cubic inches, and its customary subdivisions, i.e., half gallon, quart, pint, half pint, gill, and fluid ounce.

Article 5724, Revised Civil Statutes, 1925, requires that persons, firms, corporations and associations of persons using or selling instruments and mechanical devices for weighing or measuring have the same approved and sealed by sealers of weights and measures. The language of said Article is as follows:

> "Every person, firm or corporation, or association of persons, using or keeping for use, or having or offering for sale, weights, scales, beams or measures of any kind, instruments or mechanical devices for weighing or measuring, and tools, appliances and accessories connected with any or all of such instruments or measurements within this State, shall cause the same to be sealed and marked by the sealer of weights and measures as to their correctness, and no instrument shall be sold for the purpose of weighing or measuring unless it shall bear the seal of the inspector of weights and measures as to its correctness. (Id.)"

Before the sealer, deputy sealer or inspector of weights and measures can approve and seal an instrument of mechanical device for weighing or measuring, it is his duty

to see that said instrument or mechanism conforms with the standards of weights and measures of the State of Texas. It will be noted that the above quoted Article provides that:

> " . . . no instrument shall be sold for the purpose of weighing or measuring unless it shall bear the seal of the inspector of weights and measures as to its correctness."

Article 5727, Revised Civil Statutes, further defines the duties of a sealer, deputy sealer, or inspector of weights and measures in respect to weights and measures and weighing or measuring instruments, as follows:

> "Whenever a sealer, deputy sealer, or inspector of weights and measures compares weights and measures, or weighing or measuring instruments and finds that they correspond, or causes them to correspond to the standards, he shall seal or mark under his name such weight or measure or weighing or measuring instrument with an appropriate device showing that the weight or measure, or weighing or measuring instrument is correct, and the date of the inspection, which device shall be placed so as to be easily seen. He shall condemn and seize and may destroy incorrect weights and measures and weighing and measuring instruments, which in his best judgment are not susceptible of repair, but any weights and measures, or weighing or measuring instruments which shall be found to be incorrect, but which, in his best judgment are susceptible of repair, he shall cause to be marked with a tab or other suitable device with the words 'Out of Order' . . . "

In establishing the legal standards of weights and measures for the State of Texas, the Legislature in the Acts of 1919, page 232, enacted Article 5730 (length and surface); Article 5731 (avoirdupois and troy weights); Article 5732 (liquids); and Article 5733 (solids).

In this opinion we are interested in the standards for liquids of the State of Texas.

Article 5732, Revised Civil Statutes, 1925, provides:

> "The units or standards of measure or capacity for liquids from which all other measures shall be derived and ascertained, shall be the standard gallon and its parts designated in this chapter. The barrel shall constitute thirty-one and one-half gallons and two barrels shall make a hogshead. All other measures of capacity for liquid shall be derived from the liquid gallon by continued division by the number two, so as to make half gallons, quarts, pints, half pints and gills." (Underscoring ours.)

Construing Articles 5712, 5724, 5727, 5730, and 5732 together, we readily ascertain that the State of Texas has adopted as its standards of weights and measures the standard weights and measures of the United States Government. In respect to liquid measures the standards are the gallon, half gallon, quart, pint, half pint, gill, and the fluid ounce. Under the civil statutes all instruments or mechanical devices for measuring liquids to be used in commercial transactions in the State of Texas must conform with these standards before their legality is established. As a matter of public policy, the protection of the public demands the conformity of all instruments or mechanical devices for measuring to check with the recognized and lawful standards. The State and municipal inspector, before approving and sealing commercial instruments or mechanical devices for measuring liquids, must compare them with the standards, and unless they are in conformity the official seal of approval is not placed thereon. The law of the State of Texas does not recognize any such instrument or mechanical device for measuring liquids which cannot be tested by comparison with the standard measure of this State.

In Article 1037a, of the Revised Criminal Statutes of 1925, it is provided that:

> "The term 'false weight or measure, or weighing and measuring devices,' shall be construed to mean any weight or measure which does not conform to the United States standards of weight or measure or any weighing or measuring device which does not give correct results or is manipulated to give incorrect results in terms of United States standards of weight and measure." (Underscoring ours.)

According to the above definition, a measuring device which does not conform to the standards of measure is a "false weight on measure".

Article 1037 of the Revised Criminal Statutes makes it a misdemeanor for a person to "offer or expose for sale, sell, use or retain in his possession any false . . . measuring devices, in the buying or selling of any commodity or thing, etc.," and makes such offense punishable by fine. It reads as follows:

> "Art. 1037. False weights and measures. - Any person who, by himself or by his servant or agent of another person, shall offer or expose for sale, sell, use or retain in his possession any false weights or measures, or weighing or measuring devices, in the buying or selling of any commodity or thing or in calculating or measuring service, or in the determination of weight or measure when a charge is made for such determination, or who shall dispose of any condemned scales, weights, measures or weighing or measuring devices contrary to law; or who shall sell or offer or expose for sale less than the quantity he represents of any commodity, thing or service, or shall take or attempt

> to take more than the quantity he represents of any commodity, thing or service, when, as the buyer or weigher of any commodity, he furnishes the weight, measure, or weighing or measuring device by means of which the amount of any commodity, thing, or service is determined; or who shall sell or offer for sale, or use or have in his possession for the purpose of selling or using, any device or instrument to be used to or calculated to falsify any weight or measure; shall be guilty of a misdemeanor, and shall be published by a fine of not less than $20.00 or more than $100.00 upon the first conviction in any court of competent jurisdiction; and upon a second or subsequent conviction in any court of competent jurisdiction he shall be punished by a fine of not less than $50.00 nor more than $200.00." (Underscoring ours.)

It is also unlawful for a sealer or inspector of weights and measures to approve any weight, measure, balance, or apparatus before testing and making the same conform with the standards of the State. You are referred to Article 1041 of the Revised Criminal Statutes of 1925, which provides:

> "Any sealer, deputy sealer, inspector or local sealer appointed under the provisions of law, or discharging the duties of a sealer of weights and measures in this State, who shall seal any weight, measure, balance or apparatus, before testing and making the same conform with the standards of the State or who shall condemn any weight, measure, balance or apparatus without first testing the same, shall be fined not less than twenty-five nor more than two hundred dollars, and shall be immediately suspended from office."

Article 5732, supra, plainly and unambiguously provides that the standards of measures of capacities for liquids in the State of Texas are the gallon and subdivisions thereof derived by continual division by the number two: Half gallon, quart, pint, half pint, gill, and the ounce. It enacts in the law of Texas the binary submultiple system of liquid measurement.

If a liquid measure designated 1/10th of a gallon appeared on the market to be used in commercial transactions, it would plainly conflict with the National and State standards of liquid measurements. Under Article 1037a, Revised Criminal Statutes, it would be a 'false weight or measure'; and under Article 1041 of the Revised Criminal Statutes any sealer or inspector who approved this measure would be subject to a fine and suspension from office, since said measure does not conform to any standards of liquid measurements of the State. The set of standards of liquid measurements of the State does not include a 1/10th of a gallon standard. Consequently, it would be impossible to

compare such a measure with a State standard. The use of such a measure in commerce and trade would break down the State's standards of weights and measures. Its illegality is unquestionable in view of the provisions of the above quoted statutes.

The same reasoning would apply to any commercial instrument or measuring device dispensing liquids to the public in 1/10th of a gallon denominations.

A gasoline pump is a mechanically operated liquid measuring device. A mechanically operated liquid measuring device has been further designated as a mechanism or machine adapted for measuring and delivering liquids by volume. See National Bureau of Standards Handbook H-22, 1937, page 38.

There are two types of gasoline pumps on the market today - non-computing and computing.

It is clear that a non-computing pump whose scale or dial is graduated in decimal units of measurement, and by means of which the operator or vendor makes sales in the amount of 1/10th of a gallon, or more, to the public, would be a direct violation of the standards of measure in this State, and a violation of the above quoted Texas law. As we have attempted to show, a sale of 1/10th of a gallon of any liquid by measuring device in commercial transactions affecting the unsuspecting and inexperienced public is illegal in Texas, since it plainly conflicts with the standards of measures of this State. Article 5732, supra, provides that the break-down of a gallon shall be into binary submultiple divisions. Liquid measures and liquid measuring devices based on the binary submultiple system can be checked for conformity with the State and National standards of measures. Since the policy behind all weights and measures legislation is the achievement of uniformity in weights and measures and the protection of the public from false and fraudulent weights and measures, the weights and measures statutes of this State prohibit the use or selling of any instrument or device for weights or measuring which does not conform to the standards.

Non-computing gasoline pumps dispensing liquid gasoline in decimal subdivisions of a gallon are clearly illegal in this State, and have been barred by the Weights and measures Division of the Department of Agriculture under authority of the above quoted statutes.

The other type of gasoline pump is the mechanically computing instrument. The customer may purchase the desired gasoline by stating the amount he desires in terms of gallons or binary submultiple divisions thereof, or by asking for a certain sum of money's worth of gasoline. Such gasoline pumps have a money value graduation scale, and also a quantity graduation scale. If the scale or dial designating quantity is calibrated in decimal subdivisions of a gallon, there is no way for the inspectors or sealers of weights and measures to compare the amount sold and purchased with the legal standards of the State of Texas. The quantity designations of the pump are not in legal terms, since decimal graduation cannot possibly be made to compare with the standard set of weights and measures of the State of Texas. Where a vendor of gasoline sells his commodity by tenths of a gallon, he is absolutely infringing the law of weights and measures and jeopardizing the enforcement of

this law and the upholding of the standards of the State. It follows that Article 5732, supra, and all related Articles above quoted authorize only a graduated scale in units of measure for liquids based on binary submultiples of a gallon. The fact that the scale must be graduated on the binary submultiple system does not mean that other amounts of gasoline based purely on a pre-determined price scale may not be dispensed from said gasoline pumps. While the quantity designation of the scales and dials is required to be in legal terms, i,e., gallon and binary submultiples thereof, still the price scale on the pump might indicate that an indeterminate amount of gasoline is being sold. It is only where the customer elects to purchase by quantity that he is entitled under the law to the protection of the standards of measures of this State. The principle of the computing pump is not herein involved.

In this respect the statutes of the State of Ohio, and the regulations of that State pertaining to gasoline pumps, are illuminating.

Section 5412 of the Ohio Weights and Measures Law provides:

> "The unit of standard measure of capacity for liquids, from which all other measures of liquids shall be derived and ascertained, shall be the standard gallon, and its parts, furnished this State by the Government of the United States."

The parts furnished the State of Ohio by the United States, and referred to in this Section are, of course, the standard gallon, half gallon, quart, pint, half pint, gill and ounce.

Section 4 of the Regulations of Liquid Measuring Devices, such as gasoline pumps of the State of Ohio, reads as follows:

> "Liquid measuring devices shall have the following discharge capacities per stroke or per cycle of the primary indicating elements, and these only:
>
> "One gallon; a multiple of the gallon; two and one-half gallons; or a binary submultiple of the gallon, that is, the quantity obtained by dividing the gallon by the number two or a power of the number two: Provided, however, that a device may be constructed to deliver other amounts than the above, corresponding to predetermined money values at a definite price per gallon, but in such cases either the device shall be so constructed that the price per gallon at which it is set at any time will be clearly indicated to the customer by automatic means or this price shall be shown by means of a sign conspicuously displayed on the device."

In the State of Ohio, scales on gasoline pumps, whether computing or non-computing, in terms of decimal subdivisions of a gallon are prohibited. The scales must be graduated in binary submultiple divisions, although, as may be ascertained from reading Section 4 of the Regulations, a customer may designate the amount of gasoline he wants by price, in which case it is possible that he obtain an amount of gasoline not in conformity to the standard but corresponding to a pre-determined money value at a definite price per gallon. The customer, however, in this instance does not purchase by measure but by price designation. The law does not forbid such a purchase, but simply requires that when a purchaser buys gasoline by quantity or by measure, such sales and purchases shall be made by measurements corresponding to the standards of the State.

The District of Columbia prohibits decimal subdivisions of a gallon on the scales or dials of its gasoline pumps. Section 18 of 41 Stat. Ch. 118, p. 1217, provides:

> "That the standard liquid gallon shall contain 231 cubic inches; half gallon 115.5 cubic inches; the quart, 57.75 cubic inches; the pint, 28.875 cubic inches; the half pint, 14.437 cubic inches; the gill, 7.218 cubic inches; the fluid ounce, 1.8 cubic inches; and no liquid measure of other than the foregoing capacities, except multiples of the gallon, shall be deemed legal liquid measure in the District of Columbia."

We heartily agree with the following statement of the matter made by George M. Roberts, Superintendent, Weights, Measures, and Markets, District of Columbia, in a letter dated August 3, 1939, to Mr. W. S. Bussey, Chief of Weights and Measures Division, Department of Agriculture, Austin, Texas:

> "As a matter of fact, there is no such thing known in weights and measures anywhere, or in any arithmetic published or used in any school or college, or any other place, as a tenth of gallon measure. Pumps graduated in tenths of gallons appear to have been devised by manufacturers with a view to having gasoline sold according to money value rather than according to measure. So far as I have heard, no weights and measures inspector anywhere uses liquid test measures of tenth gallon capacities, or multiples thereof. According to standard measures, no proper test can be made of pumps graduated in tenths of gallons to determine their correctness."

In conclusion, it is the law of Texas that all measures and measuring devices for liquids used in commercial transactions conform to the standards of Measure of this State. Such measures and measuring devices as do not conform, and cannot be made to conform, are illegal, cannot be approved by sealers, and violate the civil and crimi-

nal laws. The standards of liquid measurements are the gallon, half gallon, quart, pint, half pint, and gill, according to Article 5732. Mechanisms or machines adapted to measure and deliver liquids by volume are not excepted from conforming to the standards. They are subject to being compared with the standards. Since the State's set of standards for measuring liquids does not include a 1/10th of a gallon standard, it is impossible for any device which purports to sell liquids in less than one gallon denominations like 1/10th of a gallon to conform to the State's standards. Such an instrument with decimal graduations on its scale or dial is illegal, if used in commercial transactions involving the public. Since the standard units of measure are the gallon and binary submultiple subdivisions thereof, sales of liquids must be made through mechanical measuring devices which dispense the liquids in allotments based on the statutes. To permit sales by the 1/10th gallon in such devices would undermine and break down the entire system of measures of this State which are designed to protect the public from all fraudulent measurements. It is a matter of public policy, as well as Texas law.

We have given careful consideration to the provisions of Article 5736, Revised Civil Statutes, 1925, which reads as follows:

> "All contracts hereafter to be executed and made within this State for any work to be done, or for anything to be sold, delivered, done or agreed for, by weight or measure, shall be construed to be made according to the standard weight and measure ascertained as hereinbefore provided, unless there is an express contract to the contrary. In making any adjustment of weights or measures under the laws of this State, the Standard given in this chapter shall be taken as the guide for making such adjustment." (Underscoring ours.)

An express contract is not involved in the question before us. Article 5736 above quoted does not allow the sale or use of false weighing and measuring devices in the State of Texas in commercial transactions. It deals with "commodities", not "devices", and does not authorize a sealer of weights and measures to violate Article 1041 of the Penal Code and place his seal of approval upon a "false device" which does not conform to the State and national standards.

In conclusion it can be pointed out that the courts universally sustain the constitutionality of legislation adopting and compelling the use of a uniform system of weights and measures. They hold that it is in the nature of a police regulation, and the enactment of such laws a valid exercise of the police power. As with Solomon, to the courts "divers weights, and divers measures", to quote Book of Proverbs, Chapter 20, "are alike abomination to the Lord". The language of the Texas statutes is plain and unambiguous. Full effect must be given to it for the reason that the weights and measures laws of Texas were passed for the purpose of protecting the trusting, uncritical, and unsuspecting public.

It is our opinion that a gasoline pump, which is a mechanism or machine adapted to measure and deliver liquid by volume, graduated in units of measure other than the standard units of liquid measure provided for in Article 5732, Revised Civil Statutes, 1925, i.e., the standard gallon and its parts derived by continual division by the number two, is in violation of the civil and criminal weights and measures laws of Texas and may not be legally used in commercial transactions in this State.

Yours very truly

ATTORNEY GENERAL OF TEXAS

By DICK STOUT (Sgd.)
Dick Stout
Assistant

DS:FG

This opinion has been considered in conference, approved, and ordered recorded.

GERALD C. MANN (Sgd.)
Gerald C. Mann
Attorney General of Texas